

How can the Air Quality Index (AQI) Help?

The Colville Tribes Environmental Trust Air Quality Program operates three permanent continuous PM_{2.5} monitors located in Omak, Nespelem and Inchelium. These monitors measure the weight of small particulate matter and report in millionths of a gram or micrograms per cubic meter of air.



The AQI is broken down into six categories ranging from good to hazardous using a color coded scale as shown below. The AQI provides guidance for health concerns and recommendations are based on the average concentration over a 24 hour period.

The index can also be used as a guild to activity when viewing the hourly or most current pollution levels.

Even a few hours in the unhealthy category could adversely affect your health. Wildfire smoke concentration tends to vary with wind direction, time of day, size of the fire and duration of the fire. During a large fire concentration may peak in the higher categories one to four hours a day but also may last for a week or more.

If smoke concentrations are high for short duration over multiple days people that usually do not have problems may notice some of the symptoms mentioned previously.



AIR QUALITY INDEX FOR SMALL PARTICLE POLLUTION		
Air Quality Index	Air Quality	Health Advisory
0 to 50	Good	None.
51 to 100	Moderate	Air quality is acceptable; however, there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution. Sensitive Groups include people with heart or lung disease, elders and children with respiratory problems.
101 to 150	Unhealthy for Sensitive Groups	Members of sensitive group may experience health effects. The general public is not likely to be affected.
151 to 200	Unhealthy	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
201 to 300	Very Unhealthy	Health warnings of emergency conditions. The entire population is more likely to be affected.
301 to 500	Hazardous	Health alert: everyone may experience more serious health effects.



Colville Tribal Numbers

EMS Fire and Rescue	509-634-2440
Law Enforcement	509-634-2472 or 800-551-5800
Mount Tolman Fire Center (MTFC)	509-634-3100
Natural Resources Enforcement	509-634-2472
TOSHA	509-634-2011
Environmental Trust Program	509-634-2411
Fish & Wildlife	509-634-2110
Fire Prevention Office	509-634-3157
Tribal Health	509-634-2944



CONFEDERATED TRIBES OF THE
COLVILLE RESERVATION

WILDFIRE

Environmental Trust

Air Quality
Program



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Every year thousands of acres of range and forest lands burn on the Colville Indian Reservation and surrounding areas. Smoke has no boundaries and can travel great distances causing the same health affects as smoke from local fires.

Health threat from wildfire smoke

Smoke from wildfires is a mixture of gases and fine particles from burning trees, bitter brush, sage, grasses, and other plant materials. Smoke can cause difficulty in breathing, red watery eyes, and worsen chronic heart and lung diseases.

How to tell if smoke is affecting you

Smoke can cause -

- Coughing
- A scratchy throat
- Irritated sinuses
- Shortness of breath
- Chest pain
- Headaches
- Stinging eyes
- A runny nose
- Asthma symptoms worsen



If you have heart, lung disease, diabetes or are a stoke victim smoke might make your symptoms worse.

People who have heart disease might experience—

- Chest pain
- Rapid heartbeat
- Shortness of breath
- Fatigue

Smoke may worsen symptoms for people who have pre-existing respiratory conditions, such as allergies, asthma, and chronic obstructive pulmonary disease (COPD) shown by the:

- Inability to breathe normally
- Cough with or without mucus
- Tightening of the Chest and discomfort
- Wheezing and shortness of breath

When smoke levels are high enough, even healthy people can experience some of these symptoms.



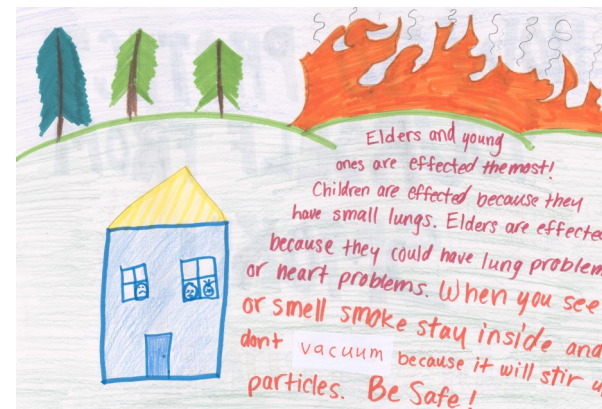
Psychological effects on children

It is important to keep in mind that children can easily become saturated with graphic pictorial images, and hear stories pertaining to smoke, flames and destruction. Resulting stress and anxiety may be manifested in a variety of ways, depending on the developmental stage of the individual child:

- Clinging, fears
- Uncooperative behavior, irritability
- Nightmares
- Physical complaints
- Changes in eating or sleeping patterns
- Regression
- Indifference

Parents and caregiver can support children in a number of ways:

- Maintain previously established routines and structure as much as possible.
- Provided an open door and a listening ear for children; encourage the expression of feelings through variety of pathways, e.g., ,music, art, journaling, talking.



Know whether you are at risk

If you have heart or lung disease, such as congestive heart failure, angina, COPD, emphysema, or asthma, you are at higher risk of having health problems than healthy people.

Sensitive Groups include people with respiratory or heart disease, the elderly and children are the groups most at risk.

Elders are more likely to be affected by smoke possibly because they are more likely to have heart or lung diseases than younger people.

Children are more likely to be affected by health threats from smoke because their airways are still developing and they breathe more air per pound of body weight than adults. Children also are more likely to be active outdoors.

For more information concerning the AQI or how wildfire smoke can affect you please contact:

AirNow -

https://cfpub.epa.gov/airnow/index.cfm?action=airnow.local_state

Washington Smoke Blog -

<http://wasmoke.blogspot.com/>

CTCR Environmental Trust Air Quality -

<https://www.cct-enr.com/environmental-trust/>

Asthma Action Plan Info-

<http://www.lung.org/lung-health-and-diseases/lung-disease-lookup/asthma/living-with-asthma/managing-asthma/create-an-asthma-action-plan.html>

Washington Department of Ecology -

<https://fortress.wa.gov/ecy/enviwa>